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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,899	07/11/2001	Steven C. Amendola	A34318; 065617.0139	9648

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EXAMINER

NECKEL, ALEXA DOROSHENK

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/902,899

Applicant(s)

AMENDOLA ET AL.

Examiner

Alexa D. Neckel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,10,12,15-17 and 25-65 is/are pending in the application.
4a) Of the above claim(s) 3-6,10,12,15-17,30,33-45,48 and 50-65 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,25-29,31,32,46,47 and 49 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 7, 2006 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 25-29, 31, 32, 46, 47 and 49 rejected under 35 U.S.C. 103(a) as being unpatentable over Amendola et al. (2004/0033194) in view of Carlson, Jr. (3,951,568).

With respect to claims 1, 25-29, 31, 32, 46, 47 and 49, Amendola et al. discloses an apparatus comprising:

a catalyst chamber (170) having an internal pressure;

a fuel chamber (120) to store hydrogen generating borohydride reactant (140);

a spent fuel/product chamber (180);

a gas conduit(160) in communication with the spent fuel chamber (180) and the fuel chamber (120); and

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a hydrogen gas outlet (210) connected to the gas conduit (160) via (120) which can be opened and closed by a vent.

Amendola et al. also discloses wherein a pump (150) is located within the conduit, but fails to disclose the specific nature of the pump.

Carlson, Jr. discloses a pump with a check valve and teaches wherein it is common practice to provide such an assembly in order to prevent backflow and assure positive flow control (col. 1, lines 11-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the pump with the check valve of Carlson, Jr. as the pump of Amendola et al. in order to gain the recognized control and backflow prevention advantages.

Regarding limitations recited in claims 1, 25-29, 31, 32, 46, 47 and 49 directed toward the manner of operating a device, such limitations do not differentiate an apparatus claim from the prior art. A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structure limitations of the claim. See MPEP 2114.

Regarding limitations recited in claims 1, 25-29, 31, 32, 46, 47 and 49 directed toward material worked upon do not limit an apparatus claim. MPEP 2115.

4. Claims 1, 25-29, 31, 32, 46, 47 and 49 rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima et al. (2001/0022960) in view of Nordskog (4,601,305).

With respect to claims 1, 25-29, 31, 32, 46, 47 and 49, Kojima et al. discloses an apparatus comprising:

a catalyst chamber (2) having an internal pressure;
a fuel chamber (1) to store hydrogen generating borohydride reactant (4);
a spent fuel/product chamber (8);
a gas conduit (9) in communication with the spent fuel chamber (8) and the fuel chamber (1); and
a hydrogen gas outlet (not numbered, see figure 1) connected to the gas conduit (9) via (8).

Kojima et al. also discloses wherein a compressor (10) is located within the conduit, but fails to disclose the specific nature of the compressor.

Nordskog discloses a compressor with a check valve and teaches wherein it is advantageous to provide such an assembly in order to improve efficiency (col. 1, lines 29-38). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the compressor of Kojima et al. with the check valve of Nordskog in order to gain the recognized efficiency advantages.

Regarding limitations recited in claims 1, 25-29, 31, 32, 46, 47 and 49 directed toward the manner of operating a device, such limitations do not differentiate an apparatus claim from the prior art. A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structure limitations of the claim. See MPEP 2114.

Regarding limitations recited in claims 1, 25-29, 31, 32, 46, 47 and 49 directed toward material worked upon do not limit an apparatus claim. MPEP 2115.

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5. Claims 1, 25-29, 31, 32, 46, 47 and 49 rejected under 35 U.S.C. 103(a) as being unpatentable over Falter (1,935,627) in view of Holmstrand (4,784,295).

With respect to claims 1, 25-29, 31, 32, 46, 47 and 49, Falter discloses an apparatus comprising:

a catalyst chamber (1) having an internal pressure;

a fuel chamber (2);

a spent fuel/product chamber (27);

a gas conduit (28) in communication with the spent fuel chamber (27) and the fuel chamber (2); and

a gas outlet (29) connected to the gas conduit (28).

Falter fails to disclose wherein the gas outlet at the gas conduit comprises a check valve.

Holmstrand discloses wherein it is well known to provide a vent with a check valve and teaches wherein it is advantageous to provide such in order control the flow through the vent (col. 3, lines 47-50). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the gas outlet (29) of Falter with a check valve as taught by Holmstrand in order to gain the recognized flow control.

Regarding limitations recited in claims 1, 25-29, 31, 32, 46, 47 and 49 directed toward the manner of operating a device, such limitations do not differentiate an apparatus claim from the prior art. A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed

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apparatus from a prior art apparatus if the prior art apparatus teaches all the structure limitations of the claim. See MPEP 2114.

Regarding limitations recited in claims 1, 25-29, 31, 32, 46, 47 and 49 directed toward material worked upon do not limit an apparatus claim. MPEP 2115.

Double Patenting

6. Claims 25-29, 31, 32, 46, 47 and 49 continue to be provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-34 of copending Application No. 09/900,625. Although the conflicting claims are not identical, they are not patentably distinct from each other for the same reasons presented in paragraph 7 in the Office Action filed September 8, 2005.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 25-29, 31, 32, 46, 47 and 49 continue to be provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 10/638,651. Although the conflicting claims are not identical, they are not patentably distinct from each other for the same reasons presented in paragraph 8 in the Office Action filed September 8, 2005.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 1, 25-29, 31, 32, 46, 47 and 49 continue to be provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 10/223,871. Although the conflicting

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claims are not identical, they are not patentably distinct from each other for the same reasons presented in paragraph 9 in the Office Action filed September 8, 2005.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claims 25-29, 31, 32, 46, 47 and 49 continue to be provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-28 of copending Application No. 10/359,104. Although the conflicting claims are not identical, they are not patentably distinct from each other for the same reasons presented in paragraph 10 in the Office Action filed September 8, 2005.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claims 25-29, 31, 32, 46, 47 and 49 continue to be provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-45 of copending Application No. 10/115,269. Although the conflicting claims are not identical, they are not patentably distinct from each other for the same reasons presented in paragraph 11 in the Office Action filed September 8, 2005.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

11. Applicant's arguments with respect to the 35 USC 102(b) and 102(e) rejections of claims 1, 25-29, 31, 32, 46, 47 and 49 have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment.

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12. It is noted that applicant did not present any arguments with regard to any of the double patenting rejections.

Conclusion

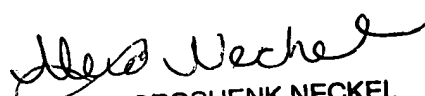
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexa D. Neckel whose telephone number is 571-272-1446. The examiner can normally be reached on Monday - Thursday from 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alexa D. Neckel
Primary Examiner
Art Unit 1764

May 10, 2006


ALEXA DOROSHENK NECKEL
PRIMARY EXAMINER